State CIO Agency IT Plans 2009 – 2011 Biennium



North Carolina Department of State Treasurer IT Plan

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State CIO Departmental/Agency IT Plans 2009-2011 Biennium

NC Department of State Treasurer IT Plans

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Executive Summary

The Department of State Treasurer (DST) is the state's lead fiduciary overseeing and protecting assets valued at more than \$75 billion. Such work demands the highest levels of prudence, security and trust, and above all else, a commitment to excellence. The department is separated into six divisions: Retirement, Investments, State and Local Government, Financial Operations, Unclaimed Property / Escheats and Information Technology. Information Technology is fully integrated into all divisions of the department and serves as the backbone for all core business process.

Over the past seven years the department has gone through a period of stabilization, infrastructure enhancements and modernization. We have had numerous successful IT projects including the implementation of Retirement and Unclaimed Property Document management Systems, a Core Banking System, and recently a fully integrated pension administration system – ORBIT. During the last year we have replaced or retired nineteen applications from our portfolio.

As we move forward in the next two years, one of two concentration areas will be in the next phase of the ORBIT system. This will include telecommunications enhancements such as call recording, "screen pops" within ORBIT and call campaigning. Also included in this plan are enhancements to the self service website for both retirees and active members and implementation of a Customer Relationship Management System.

The second major area of concentration will be in the State and Local Government Division. Two major projects are planned at this time. The first will be the implementation of a Debt / Fiscal Management system that will modernize the way Debt is managed and replace the current Fiscal Management system. The second major project will be an Integrated Document Management system that will image the entire paper files currently in place and create a workflow structure around their major business processes.

Three other state-wide initiatives that DST will be involved in over the next two years are the consolidation effort instituted by SB 991, the single email system for state employees and the use of the western data center to enhance business continuity efforts. All of these initiatives are probably two years in the future for DST.

Chapter 1 - Departmental/Agency Strategic Business Initiatives and Major Business Requirements

The Department of State Treasurer (DST) is the state's lead fiduciary overseeing and protecting assets valued at more than \$75 billion. Such work demands the highest levels of prudence, security and trust, and above all else, a commitment to excellence. These principles guide DST as we carry out our responsibilities and are reflected in initiatives listed in this plan. The department is separated into six divisions: Retirement, Investments, State and Local Government, Financial Operations, Unclaimed Property / Escheats and Information Technology. Below is a description of each division, their mission within the department and key business / IT objectives.

Retirement Division

The Retirement Systems Division (RSD) administers the statutory retirement and benefit plans, as authorized by the General Assembly of North Carolina, which cover public employees in the State. The administration of the several retirement systems requires a high level of fiduciary responsibility for the employees' trust funds with prudent, honest and efficient use of employees' and taxpayers' contributions. The purpose of the retirement systems and benefit plans is to recruit and retain skilled employees for a career in public service, by providing a replacement income for retirement, disability, or at death for an employee's survivors.

Operational Highlights for RSD in 2007 include:

- Presented recommendations and draft legislation to the 2007 Session of the General Assembly that resulted in the enactment of laws to:
 - Provide cost-of-living adjustments equal to 2.2 percent to retirees of the Teachers' and State Employees' Retirement System (TSERS), Consolidated Judicial Retirement System (CJRS) and Legislative Retirement System (LRS);
 - Increase the monthly benefit payment to beneficiaries of the Fireman's and Rescue Squad Workers' Pension Fund from \$165.00 to \$167.00 per month.
- Provide cost-of-living adjustments equal to 2.2 percent to retirees of the Local Governmental Employees' Retirement System (LGERS);

- Processed benefits for 13,310 new retirees.
- Processed refunds for 17,191 former public employees.
- Established approximately 56,714 new active member accounts.
- Increased use of direct deposit of monthly benefit payments from 184,715 to 193,893 retirees.
- Updated the Retirement Systems Division Section of the State Treasurer's Web page (www.nctreasurer.com) to include the most currently revised editions of retirement forms and handbooks.

In the past, RSD had to cope with outdated automated processes running on an aging, fragmented information infrastructure and excessive manual procedures to meet the needs of its membership. This resulted in operational inefficiencies and inconsistent information being provided to active members and retirees. At the same time, increasing constituent demands stem from the public's recognition of today's opportunities for faster access to more accurate information - for example, via the Internet.

In an effort to address this fragmentation and inefficiency, the General Assembly in the 2003-05 short session budget included authorization and funding to replace the multitude of information technology systems with an integrated system for all the retirement plans and other programs administered by RSD. The Retirement System's technology initiative (heretofore referenced as the IRSP) has been given a new project name. Moving forward, the new system will be referred to as ORBIT: Online Retirement Benefits through Integrated Technology. The ORBIT moniker was conceived and selected by the staff to convey the system's mission of providing service possibilities for tomorrow's users.

The ORBIT system went live in October 2007, providing retirees, actives and employers the capability to conduct many transactions online, 24 hours a day.

The next phase of the ORBIT system is to implement a Customer Relationship Management (CRM) System. This system will integrate with an enhanced Call Center telephone system and the ORBIT system. RSD also has the desire to update their call recording capabilities and Interactive Voice Response unit. All of these items will be included into this phase of the project. Additionally, a major upgrade to the ORBIT infrastructure, which was frozen during implementation, is continuing. This includes upgrades to SQL Server, the .NET Framework, BizTalk and Team Foundation Server.

Investment Management Division

The Investment Management Division serves as the investment arm for the Department of State Treasurer. Its functions can be categorized into three major areas of responsibility:

- 1. Management of combined assets of the North Carolina Retirement Systems. This is referred to as the Trust Fund Investment Program.
- 2. Management of the assets of the Cash Management Program.
- 3. Management of ancillary investment programs as authorized by the General Assembly.

The State Treasurer administers both the Cash Management and Trust Funds Investment programs. The Treasurer is directed by statute to "establish, maintain, administer, manage and operate" investment programs for all funds on deposit, pursuant to the applicable statutes. In doing so, the Treasurer "shall have full power as a fiduciary" and shall manage the investment programs so assets "may be readily converted into cash as needed." As of June 30, 2007, total assets under management were over \$88 billion. Assets of the Cash Management Program accounted for 14 percent of this amount, and the assets of the Trust Fund Investment Program accounted for 86 percent. Ancillary programs made up less than 1 percent. This total represents the aggregate assets of seven retirement systems, various other trust funds and the State's General and Highway Funds. In establishing the comprehensive management program, the State Treasurer, utilizing a professional investment staff, has developed an investment strategy for each portfolio that recognizes the guidelines of the governing General Statutes and provides appropriate diversification.

The Information Technology needs for the division are currently met by several applications. These applications are listed and described in the plan and only one small upgrade is planned over the next two years.

State and Local Government Finance Division

The State and Local Government Finance Division is organized to provide the State Treasurer, the Local Government Commission, the North Carolina Solid Waste Management Capital Projects Financing Agency, the North Carolina Infrastructure Finance Corporation and the North Carolina Capital Facilities Finance Agency with staff assistance in fulfilling their respective statutory functions. The Division is organized along functional lines into two major groups of services: Debt Management and Fiscal Management. The Local Government Commission (LGC) provides assistance to local governments and public

authorities in North Carolina. The LGC, staffed by the Department of State Treasurer, approves the issuance of debt for all units of local government and assists these units with fiscal management. The Commission is composed of nine members: the State Treasurer, the Secretary of State, the State Auditor, the Secretary of Revenue, and five others by appointment (three by the Governor, one by the General Assembly upon the recommendation of the President Pro Tempore and one by the General Assembly upon the recommendation of the Speaker of the House). The State Treasurer serves as Chairman and selects the Secretary of the Commission, who heads the administrative staff serving the Commission.

Operation Highlights for The State and Local Government Division Include:

- ■This year, the State regained its "Triple-A" rating from Moody's Investors Service and maintained its "Triple-A" status with the other two national rating agencies. North Carolina is one of only 7 states to enjoy top-tier rankings from all three of the rating agencies.
- During fiscal year 2006-2007, the State sold general obligation bonds totaling \$587 million. These sales included \$403.5 million in higher education bonds, \$99.2 million in clean water bonds and \$84 million in refunding bonds. The State also sold \$300 million in Certificates of Participation which included \$200 million for capital improvements and \$100 million for repairs and renovations.
- General obligation bonds sold for local governments in 2006-2007 totaled \$1.5 billion.
- Revenue Bond activity increased substantially with 27 revenue bond issues for more than \$1.4 billion sold for local governments, mainly for hospitals, water and sewer, airports and housing projects. The revenue bond sales included five refundings resulting in net present value savings of approximately \$5.5 million for units of local government. In addition, one sale totaling over \$146.6 million in bonds was executed for the power agencies to complete a synthetic fixed rate refunding saving the agency \$10.8 million. The use of interest rate swaps to hedge interest rates or accomplish synthetic refunding was greatly reduced. The City of Charlotte did synthetically fix most of one water and sewer bond issuance replacing water and sewer commercial paper executing a hedge for \$300 million.
- Other bond issues sold in 2006-2007 included over \$1.2 billion in installment purchase contracts (including refundings); \$1.14 billion in healthcare facility revenue bonds through 17 bond issues for the North Carolina Medical Care Commission; \$922.4 million for capital projects for private schools, colleges and other nonprofit corporations through 16 bond issues by the North Carolina Capital Facilities Finance Agency; \$360 million for the North Carolina Housing Finance Agency increasing the supply of affordable housing for North Carolinians of moderate and low income; and \$126.8 million in industrial revenue and pollution control bonds to finance 15 projects creating about 500 new jobs.

- Members of the staff worked with the School of Government to present the Sixth Annual State Treasurer's Conference on Local Government Accounting, Auditing and Financial Management for local government auditors and officials.
- •Memoranda were issued to local governments and their auditors on guidelines for using State lottery proceeds for school construction, GASB Statement Nos. 43 and 45 regarding Other Post Employment Benefits, payroll issues surrounding volunteer firefighters, guidelines for determining if a worker is a contractor or an employee, and the impact of Statement on Auditing Standards 112 Communicating Internal Related Matters Identified in an Audit. In addition, annual reports on fund balance, school funding and various financial and single audit reporting issues were issued to local governments.
- ■The staff reviewed the financial statements and reports of cash and investments of all local governments and public authorities. The staff also reviewed alls secondary market disclosures of units as required by the Securities & Exchange Commission.
- The 18th annual State Treasurer's Awards were presented to local governments and public authorities that demonstrated significant improvements in accounting or financial management programs, systems, methods and procedures. For the sixth year, State Treasurer's Awards were also presented to nonprofit organizations that provide valuable services to the citizens of the State.

The State and Local Government Finance Division handles the sale and delivery of all State and local debt and monitors the repayment of State and local government debt. The Division issues and monitors all State debt, including debt secured by a pledge of the taxing power of the State and debt for which repayment is subject to appropriation. After voter approval of a bond issue and with the assistance of other State agencies, the Division determines the cash needs, plans for the repayment of debt (maturity schedules) and schedules bond sales at the most appropriate time. An official statement describing the bond issue and other required disclosures about the State is prepared with the advice and cooperation of bond counsel. Finally, the Division handles the actual sale and delivery of the bonds, maintains the State bond records and registration of bonds and monitors the debt service payments

In performing these duties, the Finance Division currently files hard copies of several documents, including audit reports, audit review letters, response letters, local government general obligation bond applications and attachments, final IP contracts, and other technical forms. Imaging these documents will enable the SLGFD to more quickly and efficiently respond to inquiries from state agencies and local governments. Space limitations will not be of major concern. Data will be easier to retrieve. Also, in case of disaster, copies of important documents will be kept easily somewhere off-site. The business processes in

both the Fiscal Management and Debt Management Section of the State and Local Government Finance Division, are very paper intensive. Implementing an Integrated Document Management System (IDMS) would improve the efficiency of the divisional personnel, provide for more accurate and secure storage of documents and improve customer service. The General Assembly approved funds to hire a consultant to: 1) document current business processes and workflows, 2) prepare business and technical requirements for the new system, 3) prepare a request for proposals, 4) research and provide a list of potential vendors, 4) develop a high level project plan, 5) develop a high level risk analysis, and 6) develop an estimated budget for the implementation. This study has been completed and we will be requesting additional funding to implement the recommendations from this study.

The Debt Management Section of The State and Local Government Division issues and monitors all State debt secured by a pledge of the taxing power of the State. The Debt Management Section also is responsible for the authorization and sale of revenue bonds for the North Carolina Medical Care Commission, the Municipal Power Agencies, the North Carolina Capital Facilities Finance Agency, the North Carolina Housing Finance Agency and the North Carolina Solid Waste Management Capital Projects Financing Agency. After voter approval of a bond issue and with the assistance of other State agencies, the Division determines the cash needs, plans for the repayment of debt (maturity schedules), and schedules bond sales at the most appropriate time. An official statement describing the bond issue and other required disclosures about the State is prepared with the advice and cooperation of bond counsel. Finally, the Division handles the actual sale and delivery of the bonds, maintains the State bond records and registration of bonds, and monitors the debt service payments.

The system currently being used to monitor this debt was created in 1971 and needs to be discontinued and replaced with a system which is suited to monitor the great deal of debt and massive refunding which are common today. The current systems in place are difficult to use, difficult to maintain, extremely inflexible, do not provide timely and accurate information to our internal and external customers. Additionally, it is not equipped to monitor derivative products and variable rate debt.

The General Assembly approved funding to hire a consultant to: 1) document current business processes and workflows, 2) prepare business and technical requirements for the new system, 3) prepare a request for proposals, 4) research and provide a list of potential vendors, 4) develop a high level project plan, 5) develop a high level risk analysis, and 6) develop an estimated budget for the implementation. This study has been completed and we will be requesting additional funding to implement the recommendations from this study.

Financial Operation Division

The Financial Operations Division is responsible for ensuring that efficient banking services are provided to all State agencies and institutions. It also ensures that all funds deposited, invested, and disbursed through the State Treasurer are properly accounted for and reported. The accounting functions include accounting for investments, pension funds, trust funds, and State debt. Departmental support functions include budget preparation and control, cash management, payroll, purchasing, and accounts payable for the various divisions. Reconciliation functions include reconciling depository bank account statements and reconciling budgetary accounts with the Office of State Controller. The Division is comprised of four sections: Banking Operations, Bank Reconciliation Unit, Statewide Operations and Departmental Operations.

Operational Highlights for Financial Operations include:

- Continued the expansion of the positive pay program to 99.9 percent of accounts. More than 2,100 counterfeit warrants were discovered and resolved during the year.
- Earned \$53.7 million in the securities lending programs administered by the two custodians, Bank of New York and State Street Bank.
- Recorded more than \$25 billion worth of securities pledged to the State Treasurer to secure public deposits in financial institutions.
- Funded vendor payments, payroll and governmental transfers by processing 12,922 electronic warrants totaling \$108.4 billion.
- Presented more than 13.3 million State warrants totaling \$24.4 billion through the Federal Reserve Bank and processed them against agencies' disbursing accounts.
- Completed a search for the State Treasurer's Master Custodian and converted the assets from the two previous custodians to Mellon Trust of New England, N.A.

The major Information Technology System that supports the division is the Core Banking System. This system is relatively new and further support documentation is contained below.

The Federal Reserve Bank has mandated a new format for check processing referred to as Check 21. We are in the process of selecting a vendor and software to meet this mandate by the imposed deadline of 12/31/2008.

Unclaimed Property Division

The Department of State Treasurer oversees and maintains the state's database of unclaimed property. By law, these funds are escheated, or turned over, to the department for safekeeping. The Department is responsible for recovering and returning such property to all rightful owners. In recent years, the Department has increased efforts to get businesses to comply with the unclaimed property statutes, doubling the amount of money coming into the fund. This new money, along with prudent investments, has increased the fund to more than \$680 million. The interest earned on these funds is sent to the State Education Assistance Authority for student loans and grants. In fiscal year 2007, a total of \$22,730,705 from interest was awarded to the State Education Assistance Authority to help 52,000 North Carolinians afford college. The General Assembly also mandated that the amount of \$5,568,222 be transferred from the Principal to the DOA Veterans Scholarship Fund, \$13,981,202 from the Principal be transmitted to the Community Colleges, and \$42,911,650 from the Principal to the State Education Assistance Authority. The funds in this program were previously held by financial institutions, insurance companies, businesses and other government agencies in the form of wages, utility deposits, insurance policy proceeds and other sources of funds. Property is considered unclaimed when the apparent owner fails to communicate interest in it for a period of time called the dormancy period. Once the property has met its dormancy limit and the holder has made a good faith effort to locate an apparent owner, any funds they are holding are escheated to the Department of State Treasurer. Upon receipt of this information, the Department works to locate the owners by various means, including listing names on the website, earning media coverage through television and newspapers, mailing lists to Clerks of Court and attending outreach events, such as the North Carolina State Fair, Mountain State Fair, various civic organizations and many other events throughout the state to promote public awareness about the program.

In order to expand efforts to return unclaimed property to North Carolinians, the Division is utilizing a special software package that allows the NC Cash database to be matched against other lists and databases. The Division has also implemented an e-mail subscription feature to help connect North Carolinians with unclaimed property. Users provide their email address and basic search criteria via the website, and the feature regularly searches the NC Cash database for them, notifying them if a match is found. More than 13,000 people have registered for this service.

During the past year the Unclaimed Property Division has completed the implementation of a document management information system. The Unclaimed Property Division of the Department of State Treasurer maintains a database of the names and address of owners of unclaimed property and is responsible for recovering and returning such property to all rightful owners. Currently, the division processes holdings and claims for over 30,000 holders and 25,000

claimants a year. In the past two years, the volume of holder reports has increased by 119%, the number of claims received has increased by 340%, and the number of claims processed has increased by 149%. With the implementation of our website, which had over 2,800,000 hits/searches in FY2003, and the public awareness of the Unclaimed Property Program through outreach events, media coverage, and holder teleconferences, the volume of records has increased tremendously. With this increase in volume, the manual / paper system was grossly inadequate. Most documents were in non-electronic form, creating a disaster recovery risk. Also with the volume of records, there was a lot of time wasted searching for documents. The objective of this project was to implement a Document Management System (imaging) to improve the work processes within the Unclaimed Property Program.

Benefits: The following benefits were realized from implementing the system.

- · Increased efficiency in Claim and Reporting Processing
- · Increased efficiency in Holder Reports Processing
- · Increased quality of service to claimants and holders
- · Reduced document processing time
- · Improved accessibility to information
- · Enhance document image quality
- · Reduced document storage space
- · Improved file management and security
- · Improved compliance auditing
- · Improved disaster recovery capability
- · Increased the effectiveness of the unclaimed property web site

Chapter 2 - Requirements for Transitioning Existing IT Activities/Resources

Current projects

Project Name: Check 21

Background: As the bank for the State of North Carolina, Department of State Treasurer, NCDST, participates in check exchange through the Federal Reserve Bank or FRB. The FRB also processes the paper items for NCDST, converting them to electronic format for financial and image processing. The FRB has mandated that all items be exchanged in the Check 21 format after December 31, 2008. This combines previously separate image and financial records into one secure container. This Check 21 format is covered by the federal "Check Clearing for the 21st Century Act."

<u>Current Status:</u> An RFP was published, proposals received, BAFO's requested and received, proposals and BAFO's were evaluated and a software solution was recommended and is awaiting approval.

Project Name: Bank Imaging System Upgrade

Background: We are in the process of upgrading the Bank Imaging System to a new version of the software. This involves upgrading to the latest version of the software as well as converting from an Oracle database to a SQL Server database.

<u>Current Status:</u> We have started this project and the expected completion date is November, 2008.

Applications

Based on the output of the Applications Remediation Order Report the DST has developed a management migration plan, a roadmap, for each application. The chart on the following page provides an overall picture of the DST applications roadmap.

The current ORBIT (Online Retirement Benefits through Integrated Technology) has replaced all legacy mainframe systems in 2007and the mainframe has been shut down and removed.

The following systems will be **maintained** in 2009:

- Applicant Tracking
- Bond System
- HelpDesk System
- Retirement IDMS
- Inventory Supply System
- Portfolio Managers Registration System
- Unclaimed Property Imaging System
- Unclaimed Property Management System
- Unclaimed Property Search System
- Unisys Infolmage System

DST CURRENT APPLICATIONS - ROADMAP

Names	2008	2009	2010	2011
Online Retirement				
Benefits through				
Integrated Technology				
(ORBIT)	Enhance	Maintain	Maintain	Maintain
Applicant Tracking				
System V2	Maintain	Maintain	Replace	
Bond System	Maintain	Maintain	Maintain	Replace
CORE Banking	Enhance	Enhance	Maintain	Maintain
<u>Dynamics</u>	Enhance	Maintain	Enhance	
Help Desk	Maintain	Enhance	Maintain	Maintain
Retirement				
Integrated Document				
<u>Management</u>				
<u>System</u>	Enhance	Maintain	Maintain	Maintain
Inventory Supply				
<u>System</u>	Maintain	Maintain	Maintain	
Logics	Enhance	Maintain	Maintain	Replace
Portfolio Managers				
Registration System	Maintain	Maintain	Maintain	
<u>Unclaimed Property</u>				
<u>Management</u>				
<u>System</u>	Maintain	Maintain	Maintain	
<u>Unclaimed property</u>				
search pages	Maintain	Maintain	Maintain	
<u>Unisys Infolmage</u>				
<u>System</u>	Maintain	Enhance	Maintain	
Unclaimed Property				
Program - Integrated				
<u>Document</u>				
Management System				
(UPP-IDMS)	Maintain	Maintain	Maintain	Maintain

Infrastructure Assets

As a general rule, the IT infrastructure refresh has been consistent and economical, while meeting business needs, service levels, transaction growth, disaster recovery requirements, etc. The following list outlines several infrastructure projects that will need to happen in the next few years.

Project Name: Core Network Redundancy

<u>Background:</u> The department provides network based services to employees and customers. Single points of failure were identified in our network that could interrupt these network services if a failure or scheduled outage occurs. The network infrastructure team developed and tested a failsafe implementation that would eliminate the single points of failure. The new configuration will maximize availability of technology resources while minimizing work outages and downtime for employees and customers.

<u>Current Status:</u> The project is broken down into four phases: (1) Preparation, (2) Network installation and configuration, (3) Access switch configuration and (4) Core IOS upgrade. The project completion date is scheduled for February 2009.

Completed deliverables:

- Analyzed and determine single points of failures
- > Tested proof of concept
- Purchased hardware requirements
- > Completed Data Center modification electrical requirements
- Identified additional requirements from State-ITS

In Progress:

- The network infrastructure team is in the process of installing and configuring the new hardware.
- Schedule require outages for installation(s)

Project Name: Active Directory 2003 Upgrade

Background: Microsoft Active Directory service is used in server operating system environments to manage networks comprising Microsoft Windows clients, servers, domain controllers, and Windows-compatible applications and services. NCDST uses Microsoft's Active Directory to provide access and authorization to network based services and applications. Active Directory service is also used to enforce computer and server security policies. The current implementation of Active Directory 2000 will no longer be supported by Microsoft starting in 2010; therefore, NCDST will need to upgrade to Active Directory 2003.

<u>Current Status:</u> The project is broken down into four phases: (1) Preparation, (2) Network and AD testing, (3) Applications testing and (4) Implementation. The project completion date is scheduled for November 2009.

Project Name: Infrastructure Virtualization

Background: The department has more than 200 physical servers running in our Data Center. Each server is required to support applications in test, development, and production environments. Each server has a purchase expense, maintenance expense, power expense, and additional expenses in cables, KVM, and connectivity devices. Consolidating hardware would minimize costs and provide increased ease of physical server management and configuration. Virtualizing our physical hardware would allow multiple servers to run within the same physical machine reducing overall operating costs. Other advantages of virtualizing systems include improved business continuity and disaster recovery efforts.

<u>Current Status:</u> The project is broken down into three phases: (1) Virtual server consolidation assessment, (2) Planning, and (3) Implementation. The project due date is on-going as hardware and application refresh permit systems to be moved into the VM environment.

Completed deliverables:

VMware assessment

In Progress:

- Test VM environment
- Production Infrastructure VM environment

Project Name: Network and Application Performance Monitoring

Background: Systems and applications have become increasingly complex and contain multiple tiers of technology. A single application may contain load balancing, clustering, various applications and databases, and pass through multiple network devices. As systems grow in complexity the ability to identify and diagnose performance issues also becomes more complex and difficult. The department needs an automated and proactive solution to indentify and diagnose performance problems within its network to be able to provide the best possible services to its employees and customers. The department would benefit by being able to monitor specific performance metrics for the network including monitoring end user response times and see how the performance is broken down between the client and a multi-tiered server environment where a single

transaction may communicate with multiple servers. This would allow the department to efficiently and proactively adjust applications and systems to meet the needs of users. Additionally, trending analysis would allow the department to plan for future technology and network requirements.

<u>Current Status:</u> This project is broken down into three phases: (1) Identify requirements, (2) Procurement, and (3) Implementation.

Completed deliverables:

> Identify requirements

In Progress:

➤ RFP

Project Name: Switch Hardware Refresh

<u>Background:</u> The department has several switches used to connect desktops, devices, and servers. The manufacturer of the switches establishes dates at which they will no longer continue to support their devices. Over the next three years a small portion of the switches owned by the department will reach end of life and end of support from the manufacturer.

<u>Current Status:</u> This project is broken down into one phase: (1) Replace outdated hardware that has reached end of life and end of support with new hardware and maintenance contracts. The due date for this project is on-going.

Project Name: Storage Area Networks and Data Replication

Background: The department uses shared storage for mission critical systems. The current Storage Area Network environment is made up of Brocade fiber switches and EMC Clariion storage devices. This storage environment is tightly integrated with applications and recoverability of data is crucial to business continuity. In order to provide access to data, we have purchased a CX500 and DDR to provide data replication at remote sites.

<u>Current Status:</u> This project is broken down into two phases: (1) Provide access to data at a local remove site for business continuity, and (2) Provide access to data at our Disaster Recovery warm site in the event of a large scale disaster.

In Progress:

- Testing replication to DDR
- Setup infrastructure requirements of CX500

Project Name: Trend Micro upgrade

<u>Background:</u> Currently, the department has one server that controls all antivirus clients, both desktop and server. The current version we run is 7.3, which will not support Windows Vista or Server 2008. To complicate matters, once upgraded, the controlling server will automatically roll out client upgrades, introducing the possibility of mass outages if these updated clients are not compatible with our applications. The version needs to be upgraded to in order to support the newer operating systems. Additionally, the controlling server role needs to be split up to better accommodate controlled updates to our AV infrastructure

<u>Current Status:</u> This project is broken down into two phases: (1) Design a breakout structure that allows a controlled upgrade, preferably to test first, and then production. (2) Upgrade controlling servers to the most current version and allow clients to update as the design allows.

In Progress:

We are currently working with Trend Micro to determine software limitation that would prevent us from creating two environments. We are also researching and license requirements.

Project Name: Desktop / Laptop Refresh

<u>Background:</u> Approximately 1/3 of Department of State Treasurer's desktops are replaced each year to coincide with the 3 year maintenance that is purchased with each PC. We have found this to be adequate and the budget currently exists to continue this effort.

<u>Current Status:</u> This project is broken down into one phase: (1) Replace outdated hardware that has reached end of life and end of support with new hardware and maintenance contracts. The due date for this project is on-going.

Operations/IT management

From an assessment of the current policies, processes, and procedures and practices for the management of IT, the following initiatives are being considered:

1) Re-architect Disaster Recovery Solution to take advantage for the State Western Data Center. We are currently in the process of reviewing our current disaster recovery solution for all critical applications. Working with ITS engineering team, the goal is to explore new ways of improve our recovery

capability by leveraging the Western Data Center as a replicating site while keeping the solution cost effective. In cooperation with ITS engineering Team, a plan will be completed and delivered by January 2009 to be implemented by June 2010.

- **2) Security Information Event Management.** We are currently studying the requirements for a solution providing reporting and analysis of data from host systems and network devices. This solution would improve security incident response capabilities by helping IT security operations group be more effective in responding to external and internal threats.
- 3) 3rd Party Vulnerability Analysis for critical Web Facing Applications. Such analysis would examine our web facing critical applications to determine the adequacy of security measures, identify security deficiencies and provide countermeasures. Possible security assessment and certification will be considered.
- **4) Improve Data Center Security.** The current video surveillance system is outdated and needs replacement. Some doors with security mechanism and security system may be needed. Two-factor authentication will be considered for the server room and sensitive areas.
- **5) Emergency Response Notification System.** Evaluate and procure a system that would quickly and efficiently send emergency alerts and instructions to the entire department text messaging, emails, voice calls and desktop alerts.
- **6)** Demonstrate technical compliance with information security requirements (ISO 17799). An assessment looking at the technical security aspects in our IT environment is needed. Such assessment would review the following: technical security policies and standard, security configuration on network devices, servers and workstations, network perimeters vulnerabilities. This type of assessment reviews the technical implementation of security policies and standards with a possible certification attesting compliance. Possible critical application security assessment and certification will be considered.
- **7) ITIL Compliance.** It is our intention to start moving toward adopting ITIL. As a first step, NCDST will undergo a gap analysis to get specific recommendations on how to improve IT service support and delivery. From this analysis, we will consider the areas needing improvement and formulate a plan of action to bring us to full ITIL compliance

Human Resources

Over the past two years our staff development concentration has been in project management and ITIL concepts. We currently have eleven certified PMP's on staff and the majority of our staff has passed ITIL foundation training. As we move forward, we would like to take full advantage of the ITS "Element K" contract and continue our efforts in both technological and project / service management.

With the ORBIT project, we have successfully moved off our mainframe and are in the processes of getting our permanent staff training in browser-based web services application development. These efforts will continue into the foreseeable future.

Although the process for contractor conversion is complete we still rely on several contractors to assist in desk top support. At some point in time, we may have to convert the positions to permanent state employees as it is our intention to only use supplemental staffing contractors for short term needs such as, mass installs, specific problem resolution, and short term projects.

We currently have an adequate training budget for our needs. We could always use more staff in the application development area. We have discovered that the ORBIT system is very robust, however; it is also very complex. We may need additional staff in the future as we move forward with ORBIT Customer Relationship Management and self service enhancements.

Chapter 3 - IT Specific Economic-Driven Requirements or Opportunities

From assessments of IT resources, processes, and management practices we have identified the following IT specific economic driven opportunities that we hope to pursue:

- 1) SAN Replacement To maintain a 24x7 99.995% availability on a 3 year old SAN, the maintenance is more than the cost of purchasing a new SAN with a 3 year maintenance agreement. In addition, the newer SAN provides the technology to achieve the Service Level Agreement for our customers mentioned above with new hardware and software to guarantee availability.
- **2) PC refresh -** Maintenance for workstations 3+ years old, over 3 years, is greater that the purchase price of new workstations that include 3 year maintenance agreement. In addition they have faster processors, more memory, and the latest version of Windows software.
- **3) Server Replacement -** The maintenance cost for servers increase annually at a rate of 10%. As our applications are updated it requires new versions of the Operating System. The new Operating Systems require faster processors and more memory. Economically it makes more sense to replace production servers after 4 years or as the applications require.
- **4) Optical Replacement -** Replace the Optical media and associated jukeboxes used for the Retirement IDMS and the Banking IDMS with a secure disk storage solution. We are currently using optical media to store imaged documents for the Retirement Division and the Financial Operations Division. These documents are required under several NC statutes to be recorded on WORM media. The current hardware is close to or already out of maintenance and support.

Chapter 4 - IT Initiatives Developed From and Aligning With Plan Drivers

The IT initiatives below are derived from one or more items in Chapters 1 thorough 3 above:

INITIATIVE #1

<u>Name:</u> Replace the Optical media and associated jukeboxes used for the Retirement IDMS and the Banking IDMS with a secure disk storage solution.

<u>Summary description:</u> We are currently using optical media to store imaged documents for the Retirement Division and the Financial Operations Division. These documents are required under several NC statutes to be recorded on WORM media. The current hardware is close to or already out of maintenance and support.

<u>Major Objectives:</u> The major objective is to replace the current optical devices with a secure disk storage solution. Several vendors and solutions have been identified that meet the statutory compliance of "Write Once Read Many" technology.

<u>Timeframe:</u> Start 3rd quarter, 2008 – completed by 2nd quarter, 2009

<u>Other Initiative Relationship:</u> This upgrade will provide a more stable and secure platform which will also improve the performance of the Retirement and Banking IDMS's.

Costs: \$150,000

INITIATIVE # 2

<u>Name:</u> State and Local Government - Integrated Document Management System

<u>Summary description</u>: The SLGFD is statutorily obligated to assist State and local governments on finance issues, including issuing and monitoring debt, and monitoring and analyzing financial management practices of local governments. In performing these duties, the SLGFD currently files hard copies of several documents, including audit reports, audit review letters, response letters, local government general obligation bond applications and attachments, final IP contracts, and other technical forms. Imaging these documents will enable the

SLGFD to more quickly and efficiently respond to inquiries from state agencies and local governments. Space limitations will not be of major concern. Data will be easier to retrieve. Also, in case of disaster, copies of important documents will be kept easily somewhere off-site.

The business processes in both the Fiscal Management and Debt Management Section of the State and Local Government Finance Division, are very paper intensive. Implementing an Integrated Document Management System (IDMS) would improve the efficiency of the divisional personnel, provide for more accurate and secure storage of documents and improve customer service.

This request is to fund the development and implementation of an electronic document management system for the storage and use of audited financial statements from debt issuing authorities, along with all communications with local units, pursuant to the fiscal oversight duties of the SLGFD Fiscal Management Division. The document management system will also be used to house documents related to the issuance of debt that is managed by the SLGFD Debt Management Division. For both divisions, the proposed system will also model business processes related to the review of debt applications, the review of annual financial statements, the review and payment of audit contracts, and other activities currently relying on the routing of paper documents among staff.

<u>Major Objectives:</u> The objective of this project is to implement a Document Management System (imaging) to improve the work processes within the State & Local Government Finance Division.

Timeframe: Start 2nd quarter, 2011 – complete by 4th quarter 2011

<u>Other Initiative Relationship:</u> Implementing an Integrated Document Management System (IDMS) would improve the efficiency of the divisional personnel, provide for more accurate and secure storage of documents and improve customer service.

Costs: \$1,933,507

INITIATIVE #3

<u>Name</u>: State and Local Government – Replace the Debt Management and Fiscal Management Systems

<u>Summary description</u>: The State and Local Government Finance Division (S&LGFD) of the Department of State Treasurer in conjunction with the Local Government Commission oversees the financial operations of cities, counties, school systems, charter schools, hospital and airport authorities, and water and

sewer districts. The oversight system has two principal cornerstones: (1) control over all debt issuance and (2) budgetary and fiscal oversight powers. North Carolina is the only state legally responsible for the issuance of all local government debt. The S&LGFD directly issues or approves the sale of about 300 debt instruments annually. They also regulate the audit processes, extensively review financial reports, assist troubled communities, and can intervene in cases of mismanagement and take financial control of the entity. For the regulated units, the division requires an independent financial audit in accordance with generally accepted auditing standards.

The DST Information Technology Division and S&LGFD personnel have worked with the project staff to outline the Current IT Environment as it pertains to both Fiscal and Debt Management areas. DST plans to integrate the topology of the LOGICs application with the Debt Management application since the new system will be developed in a .Net environment. The Integrated Debt & Fiscal Management System is expected to cost \$4,448,899 over the five-year life cycle and is estimated to produce \$5,576,627 in direct quantifiable benefits and will also produce many unquantifiable such as the ability to recover from a major physical disaster to S&LGFD facilities. Funds have been allocated to cover expenditures related to the S&LGFD-INTEGRATED DEBT & FISCAL MANAGEMENT SYSTEM; and with a projected ROI of 40% over five years, project activities to implement the system should commence.

Major Objectives: Benefits of the integrated system were calculated using imputed benefits derived from efficiency improvements in both the Fiscal Management and Debt Management sections operations. The new LOGICs will have the ability to electronically accept the financial audit contracts, the financial statements, and associated documentation. Additionally, a fully integrated system will ease the burden of sharing data across systems and make it easier to review debt information. This analysis focuses solely on the professional staff in the Debt and Fiscal Management sections. The Debt Management section includes 12 financial analysts, plus .5 of the Division director's time, and 1 individual that manages the State Capital Facilities Board for a total of 13.5 staff. The Fiscal staff number is 14.5 individuals which includes 5 Directors.

The principal value created by the S&LGFD's work is providing the necessary financial oversight and management of debt issuances that result in the lowest possible debt costs for the units under S&LGFD governance. The State's management program for both the Fiscal management "Auditing" of financial statements and the State's sole authority to control the actual debt issuance is considered to be the model program in the United States. As a result of this,

Fitch Investors Service grants North Carolina units a one notch, half rating upgrade for all debt rated at AA or below. In 2003, North Carolina had \$5.6 billion in debt with the AA or below rating. The one notch, half rating upgrade resulted in annual interest savings of \$5.2 million. By 2007 this had grown to \$8.5 billion in debt with the AA or below rating and the one notch, half rating upgrade now generates \$7.8 million in annual interest savings. Over the five year period from 2003 to 2007, the average annual growth rate in the AA or below debt has been 11%.

Assuming the same growth rate of debt over the next 5 years, the S&LGFD should save the units interest savings of between \$8.7 and \$14.7 million annually. Assuming a stable headcount of 28 professional staff in both Fiscal and Debt management, each employee will produce between \$312,000 and \$527,000 in benefits for the units and indirectly all North Carolinians. The net hourly value of each full-time employee is roughly between \$118 and \$221 after a deduction of \$31 per hour in salary costs, which is the average burdened hourly rate for the S&LGFD staff.

Each moment that a professional staff spends in entering data into various spreadsheets and producing reports, it detracts from time spent on higher value analysis activities that protect the current outstanding reputation for fiscal oversight and governance which enables the units to realize the interest savings described above. The S&LGFD-INTEGRATED DEBT & FISCAL MANAGEMENT SYSTEM will reduce the time spent in executing tasks in serial order which will free up individuals for more beneficial activities. The current paper intensive review process has a number of steps that are strictly the result of retrieving and storing the paper based files and reports. The implementation of the S&LGFD-INTEGRATED DEBT & FISCAL MANAGEMENT SYSTEM will allow the professional staff to eliminate those steps in their processing. Also, to be conservative, no efficiency gains are planned in this analysis for the S&LGFD 9 administrative staff.

From a technical perspective, a consolidated database of Fiscal and Debt data will result in extensive savings in worker hours in that a single login would replace multiple attempts at logging into LOGICs to access Debt related data. If the benefit were to be multiplied by a factor of 14.5, then significant benefits would be realized that could translate into substantial savings in costs in the Fiscal Management section of S&LGFD.

The elimination of the manual tasks and the spreadsheet based system will result in gains in efficiencies and the virtual elimination of errors of calculations of which spreadsheet systems are prone. The improved efficiency for Debt Management is estimated at 3%. For Debt Management's 13.5 professional staff, the annual benefit creation is between \$107,000 and \$200,000. The efficiencies gained across both Debt and Fiscal Management Sections will produce improvements in staff efficiencies of 12% from \$428,000 to \$800,000 for Fiscal staff and a 9% improvement in staff efficiencies in the Debt area from \$320,000 to \$600,000. In the implementation year, no benefits derived from improved processing time can be realized since most of the year will be spent on the design and construction of the integrated document management system. The full projection of benefits is described under Benefits in section 3.9.

Timeframe: Start 4th quarter, 2009 – complete by 3rd quarter, 2011

Other Initiative Relationship: Gaining these efficiencies also are important to allow the S&LGFD to do more work as illustrated by the growth rate in debt issuance, the ever increasing complexity of the financial statements and the associated accounting standards that each reporting entity must meet. This system will allow professional staff additional time to account for both increases in volume and the additional complexity in coming years without the need to invest in additional professional staff.

Costs: \$4,448,899

INITIATIVE # 4

Name: Unclaimed Property Audit System

<u>Summary description</u>: The Unclaimed Property Program – Audit Application Project is charged with the replacement of the current software applications being used to carry out the Audit Process.

The current application (APG) has no technical support available and is not userfriendly. A number of additional applications must also be used in the current process which complicates the process and leads to Auditors having to manually re-enter the same data multiple times.

The new application(s) for the Audit Process will have technical support available, will provide a more user-friendly interface, and will minimize the amount of manual data re-entry that is required.

Off-the-shelf applications will be researched as a possible solution along with examining the possibility of building a custom application in-house.

<u>Major Objectives:</u> The objectives of a new application for the Audit Process include:

- Having technical support available for the application being used
- Providing the Auditors with a more user-friendly application
- Reducing the amount of manual data entry required
- Increasing the number of Audits that can be processed by decreasing the time required to process each Audit
- Decreasing the number of separate applications that must be used by the Auditors
- Allowing more than one Auditor to view an Audit at the same time

<u>Timeframe</u>: Start 2nd quarter, 2008 – complete by 3rd quarter, 2009

<u>Other Initiative Relationship:</u> The Audit and Compliance staff is responsible for researching Holders and performing approximately 50 physical audits each year. An increase in the number of Audits that can be performed each year is desirable in order to better verify compliance on the part of the Holders.

Costs: \$75,000

INITIATIVE #5

Name: Customer Relationship Management (CRM) System

<u>Summary description</u>: Replace the current Retirement Communications Tracking System with a COTS CRM System and integrate with the ORBIT System.

<u>Major Objectives:</u> The Retirement Systems Division desires to improve their ability to capture, track and analyze external contacts. The CRM system must be fully integrated with the ORBIT System as well as MS Office System.

<u>Timeframe:</u> Start 4th quarter, 2009 – complete by 2nd quarter, 2010

<u>Other Initiative Relationship:</u> Improve the operational efficiency of the Retirement Division.

Costs: \$707,000

INITIATIVE #6

<u>Name:</u> Replace or Upgrade the Retirement Systems Division Call Center Telephone System

<u>Summary description</u>: Replace or upgrade the current Symposium Telephone System with newer technology which will be fully integrated with a CRM System, as well as, the ORBIT System.

<u>Major Objectives:</u> Increase reliability, and provide better service to the NC Employer Units, State Retirees and State employees

Timeframe: Start 4th quarter, 2009 – completed by 1st quarter, 2010

<u>Other Initiative Relationship:</u> Improve the operational efficiency of the Retirement Division.

Costs: \$150,000 - \$250,000

<u>INITIATIVE # 7</u>

Name: 3rd Party Vulnerability Analysis for critical Web Facing Applications

<u>Summary description</u>: Such analysis would examine our web facing critical applications to determine the adequacy of security measures, identify security deficiencies. Possible security assessment and certification will be considered.

<u>Major Objectives:</u> Define scope of assessment, select a vendor that will perform the assessment and provide a detailed report to include findings and assist in providing countermeasures. Obtain certification once all findings have been addressed.

<u>Timeframe:</u> 2009-2010

<u>Other Initiative Relationship:</u> Continual improvement of our security program and posture.

Costs: \$150,000

INITIATIVE #8

Name: Core Banking System Upgrade

Summary description: The current version of the Oracle database being used by the Core Banking System is no longer supported by Oracle and needs to be upgraded to a more current version. No upgrades are planned for the Banking System, just the database.

<u>Major Objectives:</u> Provide a stable and supported version of the Oracle database.

<u>Timeframe:</u> Start 1st quarter, 2009 - complete by 2nd quarter, 2009.

<u>Other Initiative Relationship:</u> This will provide a more stable Core Banking application to support an important departmental mission.

Costs: \$490,000

INITIATIVE #9

Name: ORBIT Infrastructure Upgrade

<u>Summary description</u>: Replace the current ORBIT System servers and operating systems with new technology.

<u>Major Objectives:</u> The major objective is to keep the ORBIT System up-to-date with the latest technology infrastructure. This includes replacing the servers with newer technology, taking advantage of 64 bit architecture, taking advantage of VM technology and implementing Windows Server 2008.

<u>Timeframe:</u> Start 2nd quarter, 2009 – complete by 4th quarter, 2009.

<u>Other Initiative Relationship:</u> Improve the operational efficiency of the ORBIT System.

Costs: \$450,000

INITIATIVE # 10

Name: Server Virtualization

<u>Summary description:</u> Where practical, convert all physical servers to a VMWARE ESX environment where 4-8 virtual servers will reside on 1 physical server.

<u>Major Objectives:</u> To reduce the physical environment demands (HVAC, electrical, space) and the amount of physical servers needed we will migrate physical servers to virtual servers. This will also reduce maintenance expenses since the total amount of servers will be reduced by 50% and give us resources on demand.

<u>Timeframe:</u> Complete by end of 2nd^t quarter 2010

<u>Other Initiative Relationship:</u> This project will enhance our DR capabilities and give us the flexibility for any DR scenario.

Costs: \$200,000

INITIATIVE # 11

Name: Data Replication

<u>Summary description:</u> Replace our tape creation and offsite storage with a system to replicate data with online access for DR and data loss.

<u>Major Objectives:</u> Purchase hardware and software to replicate data to an offsite location. Data would be available real time in the event of hardware failure or a disaster situation.

<u>Timeframe:</u> Complete by end of 4th quarter 2009

Other Initiative Relationship: This hardware/software is the key to providing DST with the means to meet recovery time objectives for our customers

Costs: \$300,000

<u>INITIATIVE # 12</u>

Name: Security Information Event Management

<u>Summary description</u>: We are currently studying the requirements for a solution providing reporting and analysis of data from host systems and network devices. This solution would improve security incident response capabilities by helping IT

security operations group be more effective in responding to external and internal threats.

<u>Major Objectives:</u> Compile requirements and deploy solution. Provide 24X7 security events monitoring across the network. Use this solution to meet system log retention security requirement.

<u>Timeframe:</u> 2009-2010

<u>Other Initiative Relationship:</u> Will provide log management and retention along with security event monitoring and correlation. This solution could replace our host Intrusion Detection System. It will be designed to work in conjunction with our Network Detection System.

Costs: \$80,000

INITIATIVE # 13

Name: SAN Replacement

Summary description: Current 4 year old EMC Clariion CX700 will be replaced or upgraded with current technology.

<u>Major Objectives:</u> Increase the capacity for growth, provides 24x7 99.995% availability required by our business plan, financial savings over 3 years by replacing new hardware and eliminating the maintenance expense of old outdated hardware and provides software for management of Exchange, SQL, and ORACLE.

<u>Timeframe:</u> Complete by end of 4th quarter 2009

<u>Other Initiative Relationship:</u> This hardware is key to all business processes and our 24x7 customer service agreement.

Costs: \$250,000

<u>INITIATIVE # 14</u>

Name: Improve Data Center Security

<u>Summary description</u>: The current video surveillance system is outdated and needs replacement. Some doors with security mechanism and security system

may be needed. Two-factor authentication will be considered for the server room and sensitive areas.

<u>Major Objectives:</u> Provide a more controlled access to the Data Center by analyzing any existing weakness, plan for the remediation of those weaknesses and implement those plans. At a minimum, improve video surveillance.

Timeframe: 2008

Other Initiative Relationship: Continual improvement of our security program.

Costs: \$10,000

INITIATIVE # 15

<u>Name:</u> Upgrade Core Banking to accommodate the new Beacon Financial System Interface

<u>Summary description</u>: CMCS and NCAS are two systems used by agencies in NC. OSC is planning to replace them with SAP software and has named the new system "Beacon." This will change some of the interfaces used in the Core Banking System implemented at NCDST. The most complex of these is the CMCS interface.

<u>Major Objectives:</u> NCDST will plan the next major Core Banking System upgrade around this OSC change. NCDST will implement the most current versions of the Core Banking System in order to accommodate changes to the interfaces for the new Beacon Financial System.

<u>Timeframe:</u> Estimated start – 1st quarter, 2010 – estimated completion – 2nd quarter, 2011.

<u>Other Initiative Relationship:</u> This will provide a more stable and efficient system for the banking platform and provide for a more effective means of interfacing financial data with the OSC.

Costs: \$5,296,813

INITIATIVE #16

Name: Upgrade Portia System to current release

<u>Summary description:</u> Upgrade the Portia System from version 7.01b to version 9.0, the current release.

<u>Major Objectives:</u> The Investment group is currently using Portia version 7.01b which was upgraded in 06/2006. Thompson Financial has released two versions since our upgrade, version 8.0 and now 9.0 released Dec 2007.

<u>Timeframe:</u> Complete by end of 1st quarter 2010

<u>Other Initiative Relationship:</u> Upgrading the Portia System will improve the efficiency of the Investment Division and provide a more stable financial platform going forward.

Costs: \$50,000

<u>INITIATIVE # 17</u>

Name: ISO 17799 Audit

<u>Summary description</u>: An ISO17799 based Information Security Program has been adopted since 2002. Since then, several assessments have been performed such as Security Program audit, penetration testing and various audits. An assessment looking at the technical security aspects in our IT environment is needed. Such an assessment would review the following: technical security policies and standard, security configuration on network devices, servers and workstations, network perimeters vulnerabilities. This type of assessment reviews the technical implementation of security policies and standards with a possible certification attesting compliance. Possible critical application security assessment and certification will be considered.

<u>Major Objectives:</u> Define scope of assessment, select a vendor that will perform the assessment and provide a detailed report to include audit findings and assist in the resolving of the findings. Obtain certification once all findings have been addressed.

<u>Timeframe:</u> 2009-2010

Other Initiative Relationship: Continual improvement of our security program.

Costs: \$150,000

INITIATIVE # 18

<u>Name:</u> Upgrade/Replace Content Management System (CMS) with Microsoft Office Sharepoint Server (MOSS).

<u>Summary description:</u> Our current CMS 2002 infrastructure is now out of mainstream support by Microsoft. Microsoft has integrated ALL of the functionality of the CMS 2002 product into a new product called Microsoft Office Sharepoint Server (MOSS) 2007.

<u>Major Objectives:</u> The new environment will deliver a lower cost of ownership once implemented and a more manageable learning environment for our DST authors and editors. The benefit of the new MOSS 2007 platform to our environment includes:

- Library functions for check-in/check-out of Web content.
- Workflows for approving and publishing web content.
- Integrated search (built-in search feature that will replace another third-party product that we currently use at DST called DTSearch. This will produce additional cost savings in maintenance for DST
- Common infrastructure for managing intranet, extranet, and Internet sites.
- Tightly integrated web based environment of all pieces of the software from administrator to user functions. This is unlike the current CMS 2002 environment. This makes for a much more stable environment

<u>Timeframe:</u> Start 1st quarter, 2010 – completed by 3rd quarter, 2010

<u>Other Initiative Relationship:</u> This upgrade will provide a more stable and efficient platform for our DST authors and editors to use in managing the DST website content.

Costs: \$200,000

INITIATIVE # 19

Name: Exchange migration to ITS

<u>Summary description:</u> In response to legislation and enhanced customer services, the DST Exchange mailboxes will be migrated to ITS in a Statewide consolidated email system.

<u>Major Objectives:</u> Meet required legislative requirements and provide our customers with the latest email technology. This should result in a more secure and reliable environment.

<u>Timeframe:</u> Complete by end of 3rd quarter 2010

Other Initiative Relationship: This will meet legislation requirements.

Costs: \$100,000

INITIATIVE # 20

Name: ITIL Assessment

<u>Summary description</u>: It is our intention to start moving toward adopting ITIL. As a first step, NCDST will undergo a gap analysis to get specific recommendations on how to improve IT service support and delivery. From this analysis, we will consider the areas needing improvement and formulate a plan of action to bring us to full ITIL compliance.

<u>Major Objectives:</u> Review current practices by auditing IT management processes. Audit the quality of current management processes. Provide an assessment outlining the processes weaknesses or lack of, as per recommended by ITIL guidelines.

Timeframe: 2009-20010

<u>Other Initiative Relationship:</u> OITS ITIL implementation and general enhancements to providing quality service.

Costs: \$75,000

INITIATIVE # 21

Name: ORBIT Self Service Improvements

<u>Summary description</u>: Enhance the current ORBIT self service capabilities for both active and retired members.

<u>Major Objectives:</u> RSD is seeking to enhance self service through ORBIT in an effort to provide more comprehensive customer service on-line. One primary component of this added functionality would be on-line form submission.

Currently, members/employers submit paper forms to RSD with their signature and a notarization, if required. (The idea of providing electronic signatures and/or other options in lieu of notarization is already being researched and addressed by RSD). RSD staff now manually enters the information contained on the forms as it is provided by the members/employers. Under the proposed procedure, members/employers would fill out and submit information via an ORBIT self-service module. The details submitted through these forms would automatically enter ORBIT without need for manual data entry. The forms would not be accepted with invalid information (i.e. a missing SSN, DOB, or other required data element). When an error occurs, the member/employer would immediately be made aware of the problem (on their screen) and told how to correct it, so that the information could be successfully re-submitted. Updates regarding the status of submitted data would be available for the member/employer to view at any time.

Also, the creation of a disability module within self service would allow members/employers to enter applications on-line and obtain information about disability processes and procedures more readily. They could see details about the status of submitted information, view Medical Board reviews, track earnings limitations, etc.

Timeframe: Start 3rd quarter, 2009 – complete by end of 2010.

Other Initiative Relationship: Improve the operational efficiency of the Retirement System Division. The benefits of implementing on-line form submission and the development of a disability module through ORBIT self service would be significant. Among the improvements in customer service would be immediate acknowledgement for receipt of information and feedback regarding any incomplete data. As a result, turn-around times for processing benefits would be positively affected. Having this information accessible on-line to members/employers would help offset the number of inquiries received by RSD via phone calls, visits, e-mails, and letters. On-line submission would help eliminate the impact of lost paperwork in the mail as well as forms misdirected internally. The overall volume of mail received by RSD should be reduced, too. In addition, potentially fewer RSD staff in Records would be needed to scan forms and applications into the system. The types of transactions to be incorporated into the on-line enhancements include: designation/changes of beneficiary (ies), selecting coverage through the State Health Plan, applying for retirements, refunds, disability, service purchases, etc.

Other similar agencies/organizations that use online form submission: NC 401(k) Plan, administered by Prudential Retirement Internal Revenue Service NC Department of Revenue NYCTRS
Ohio PERS

Pennsylvania PSERS

<u>Costs:</u> \$650,000